

EUROPEAN PATENT OFFICE

Patent Abstracts of Japan

PUBLICATION NUMBER : 2001039954
PUBLICATION DATE : 13-02-01

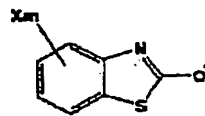
APPLICATION DATE : 01-02-00
APPLICATION NUMBER : 2000024393

APPLICANT : TOMONO AGRICA CO LTD;

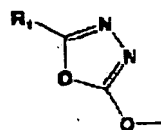
INVENTOR : TOMONO KOTARO;

INT.CL. : C07D249/18 A01N 43/647 A01N 43/707
A01N 43/713 A01N 43/76 A01N 43/78
A01N 43/824 A01N 43/828 C07D253/08
C07D257/04

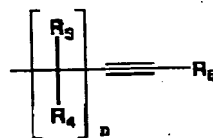
TITLE : HETEROCYCLIC DERIVATIVE



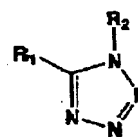
I



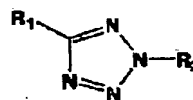
II



III



IV



V

ABSTRACT : PROBLEM TO BE SOLVED: To obtain a new compound useful as an active ingredient of a pest controlling agent, especially as an agricultural and horticultural pest controlling agent.

SOLUTION: This compound is represented by the formula Het-R2 (Het is a benzoheterocyclic ring represented by formula I (X is a 1-6C alkyl, a halogen or the like; and (m) is 0-2) or the like; a heterocyclic ring or the like represented by formula II [R1 is H, a halogen, a (substituted) 1-6C alkyl or the like] or the like; R2 is a group represented by formula III [R3 to R5 are each H, a halogen, a (substituted) 1-6C alkyl, a (substituted) phenyl or the like; and (n) is 0-5] or the like), e.g. 1-(3-fluorophenyl)-4-(2-butyryl)-5(4H)-tetrazolinone. The compound represented by the formula Het-R2 can be produced by a method, etc. for reacting, e.g. a 5-substituted tetrazol prepared from a compound represented by the formula R1-CN and a compound represented by the formula Me3Si-N3 with a compound represented by the formula R2-X' (X' is a leaving group such as a halogen) in the presence of a base (e.g. potassium carbonate) in a solvent and providing compounds represented by formulae IV and V.

COPYRIGHT: (C)2001, JPO

BEST AVAILABLE COPY